Title (en)

AUTOMATIC PARKING CONTROL METHOD AND APPARATUS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG VON AUTOMATISCHEM PARKEN

Title (fr)

PROCÉDÉ ET APPAREIL DE COMMANDE DE STATIONNEMENT AUTOMATIQUE

Publication

EP 4023517 A4 20221109 (EN)

Application

EP 20894171 A 20201127

Priority

- CN 201911206068 A 20191129
- CN 2020132384 W 20201127

Abstract (en)

[origin: EP4023517A1] Provided are an automatic parking control method and apparatus, relating to the industrial field of vehicles. The method comprises: when a speed of a vehicle is in a preset speed range and a time that the speed of the vehicle is in the preset speed range is greater than or equal to a preset time, collecting image data and radar data around the vehicle (101); inputting the image data and the radar data into a preset convolutional neural network model, and outputting at least one parking slot information (102); selecting target parking slot information according to a received parking-in selection operation (103); and according to the target parking slot information, generating a vehicle parking-in track for the vehicle to automatically park according to the vehicle parking-in track (104). In the disclosure, parking slots around the vehicle may be searched in advance by detecting the speed of the vehicle, and parking slots that the vehicle may park in under various complicated conditions may also be identified by the convolutional neural network model; and further, various parking requirements of a user may be met by providing a plurality of parking slots for parking, thereby perfecting an automatic parking system, and improving the driving experience of the user.

IPC 8 full level

B62D 15/02 (2006.01); **B60W 30/06** (2006.01); G06N 3/06 (2006.01)

CPC (source: CN EP KR US)

B60W 30/06 (2013.01 - CN EP KR US); **B60W 40/02** (2013.01 - KR); **B60W 40/105** (2013.01 - US); **B60W 50/0205** (2013.01 - EP US); **B60W 50/029** (2013.01 - EP KR); **B60W 50/14** (2013.01 - EP US); **B60W 60/0011** (2020.02 - KR); **G01S 7/417** (2013.01 - EP); **G01S 13/867** (2013.01 - EP); **G01S 13/931** (2013.01 - EP US); **G06N 3/06** (2013.01 - KR); **G06V 10/82** (2022.01 - US); **G06V 20/586** (2022.01 - US); B60W 2050/0002 (2013.01 - KR); B60W 2050/0005 (2013.01 - KR); B60W 2050/0215 (2013.01 - EP US); B60W 2050/0295 (2013.01 - EP); B60W 2050/146 (2013.01 - EP US); B60W 2420/403 (2013.01 - EP KR US); B60W 2420/408 (2024.01 - EP KR US); B60W 2510/1005 (2013.01 - EP); B60W 2520/06 (2013.01 - KR); B60W 2520/10 (2013.01 - EP KR); B60W 2556/20 (2020.02 - US); B60W 2556/35 (2020.02 - US); B62D 15/0285 (2013.01 - EP); G01S 2013/9314 (2013.01 - US)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4023517 A1 20220706; **EP 4023517 A4 20221109**; **EP 4023517 B1 20240103**; CN 110901632 A 20200324; CN 110901632 B 20210406; JP 2022551272 A 20221208; JP 7379683 B2 20231114; KR 20220093095 A 20220705; US 11745730 B2 20230905; US 2022340127 A1 20221027; WO 2021104476 A1 20210603

DOCDB simple family (application)

EP 20894171 A 20201127; CN 201911206068 A 20191129; CN 2020132384 W 20201127; JP 2022520545 A 20201127; KR 20227010729 A 20201127; US 202017765217 A 20201127